

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: SAWYER POND	Lake Area (ha): 19.02
Town: LIVERMORE	Maximum depth (m): 29.6
County: Grafton	Mean depth (m): 12.2
River Basin: Saco	Volume (m ³): 2313500
Latitude: 44°03'00" N	Relative depth: 6.0
Longitude: 71°22'40" W	Shore configuration: 1.23
Elevation (ft): 1937	Areal water load (m/yr): 12.43
Shore length (m): 1900	Flushing rate (yr ⁻¹): 1.00
Watershed area (ha): 310.8	P retention coeff.: 0.52
% watershed ponded: 1.5	Lake type: natural

BIOLOGICAL:

	6 February 1990	8 August 1989
DOM. PHYTOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	DINOBYRON 95%
#2		
#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)		
CHLOROPHYLL-A (µg/L)		0.57
DOM. ZOOPLANKTON (% TOTAL) #1	CALANOID COPEPOD >99%	CALANOID COPEPOD 30%
#2		KERATELLA 22%
#3		COLLOTHECA 18%
ROTIFERS/LITER	0	20
MICROCRUSTACEA/LITER	6	30
ZOOPLANKTON ABUNDANCE (#/L)	6	50
VASCULAR PLANT ABUNDANCE		Scattered
SECCHI DISK TRANSPARENCY (m)		9.3
BOTTOM DISSOLVED OXYGEN (mg/L)	5.2	3.6
BACTERIA (fecal col., #/100 ml) #1		
#2		
#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 4.2
Hypolimnion volume (m³): 1229500

CHEMICAL:

Lake: SAWYER POND

Town: LIVERMORE

	6 February 1990		8 August 1989		
DEPTH (m)	10.0	20.0	2.0	6.5	20.0
pH (units)	6.4	6.3	6.8	6.5	6.2
A.N.C. (Alkalinity)	4.8	5.5	3.1	4.2	6.2
NITRATE NITROGEN	0.08	0.10	0.11		0.10
TOTAL KJELDAHL NITROGEN	0.13	0.13	0.49	0.12	0.15
TOTAL PHOSPHORUS	0.003	0.004	0.005	0.007	0.006
CONDUCTIVITY (μ mhos/cm)	26.0	27.2	22.0	23.6	29.1
APPARENT COLOR (cpu)	8	8	14	13	11
MAGNESIUM			0.16		
CALCIUM			2.0		
SODIUM			< 3.0		
POTASSIUM			0.80		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	3	3	3		3
TN : TP	70	58	120		42
CALCITE SATURATION INDEX			3.7		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1989

D.O. S.D. PLANT CHL TOTAL CLASS

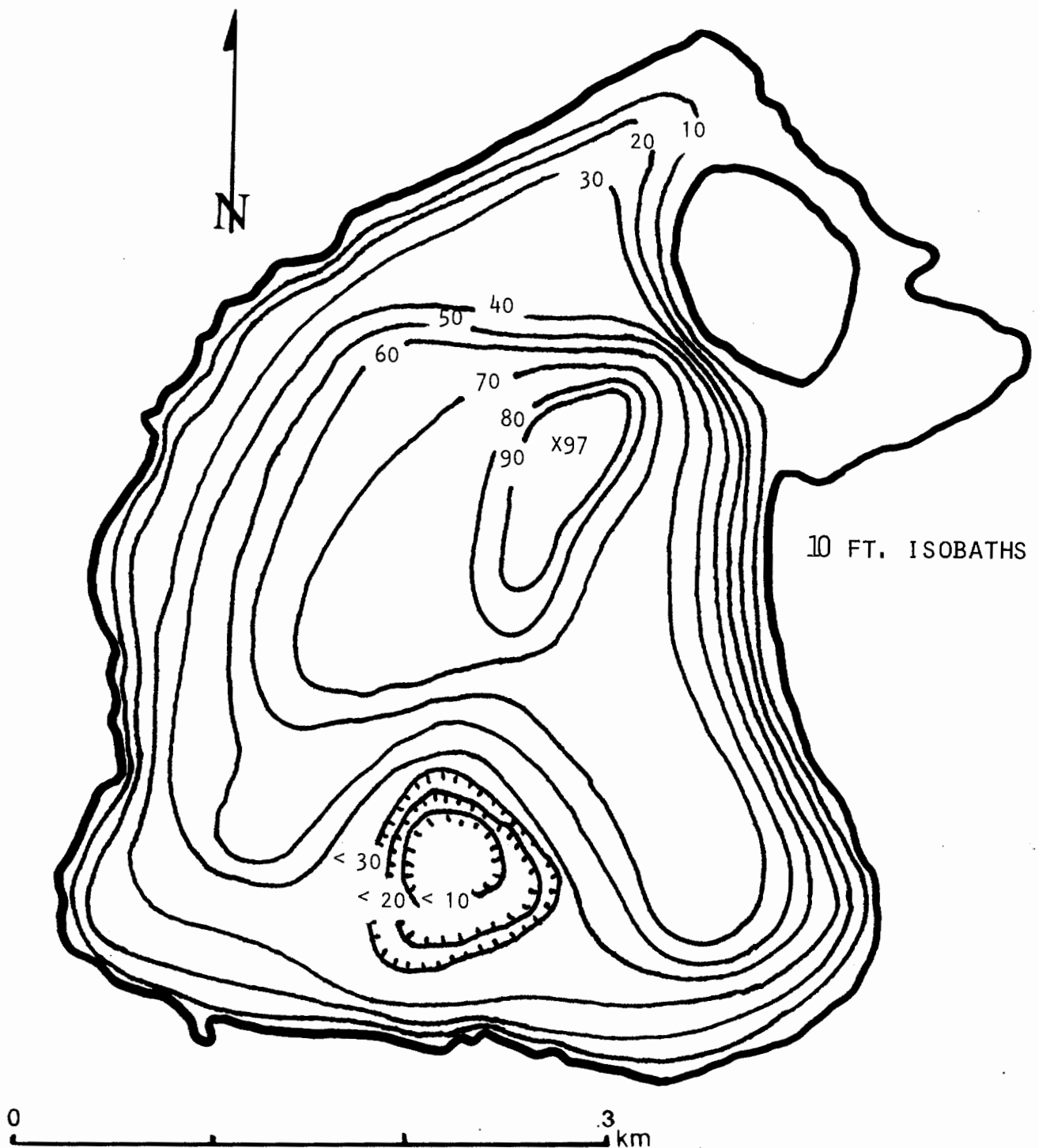
2	0	1	0	3	Oligo.
---	---	---	---	---	--------

COMMENTS:

1. Also known as Big Sawyer Pond.
2. This is a remote pond in the White Mountain National Forest. It is accessible by trail only. An AMC shelter and tent sites were located along the shore.
3. Motorized boats are not allowed on the pond.
4. Some rotifers (namely Keratella, Kellicottia, and Polyarthra) were observed in the winter plankton haul. They were not, however, picked up in the count; thus, the zero value for rotifers per liter.
5. No whole-water phytoplankton analysis was completed.

Sawyer Pond

Livermore



ROUGH BATHYMETRIC CHART
SOUNDED BY FATHOMETER
DES - 1989

FIELD DATA SHEET

LAKE: SAWYER POND
DATE: 08/08/89

TOWN: LIVERMORE
WEATHER: CLEAR AND COOL

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	21.5	8.5	94 %
	1.0	21.5	8.4	94 %
	2.0	21.5	8.3	93 %
	3.0	21.2	8.3	93 %
	4.0	17.7	12.1	125 %
	5.0	12.2	12.3	113 %
	6.0	9.3	12.0	104 %
	7.0	7.8	11.7	95 %
	8.0	6.7	11.3	90 %
	9.0	5.9	10.7	82 %
	10.0	5.4	10.2	79 %
	15.0	4.2	8.2	62 %
	20.0	4.1	6.1	46 %
	25.0	4.1	4.8	36 %
	27.0	4.1	3.6	27 %

SECCHI DISK (m): 9.3

COMMENTS:

BOTTOM DEPTH (m): 28.3

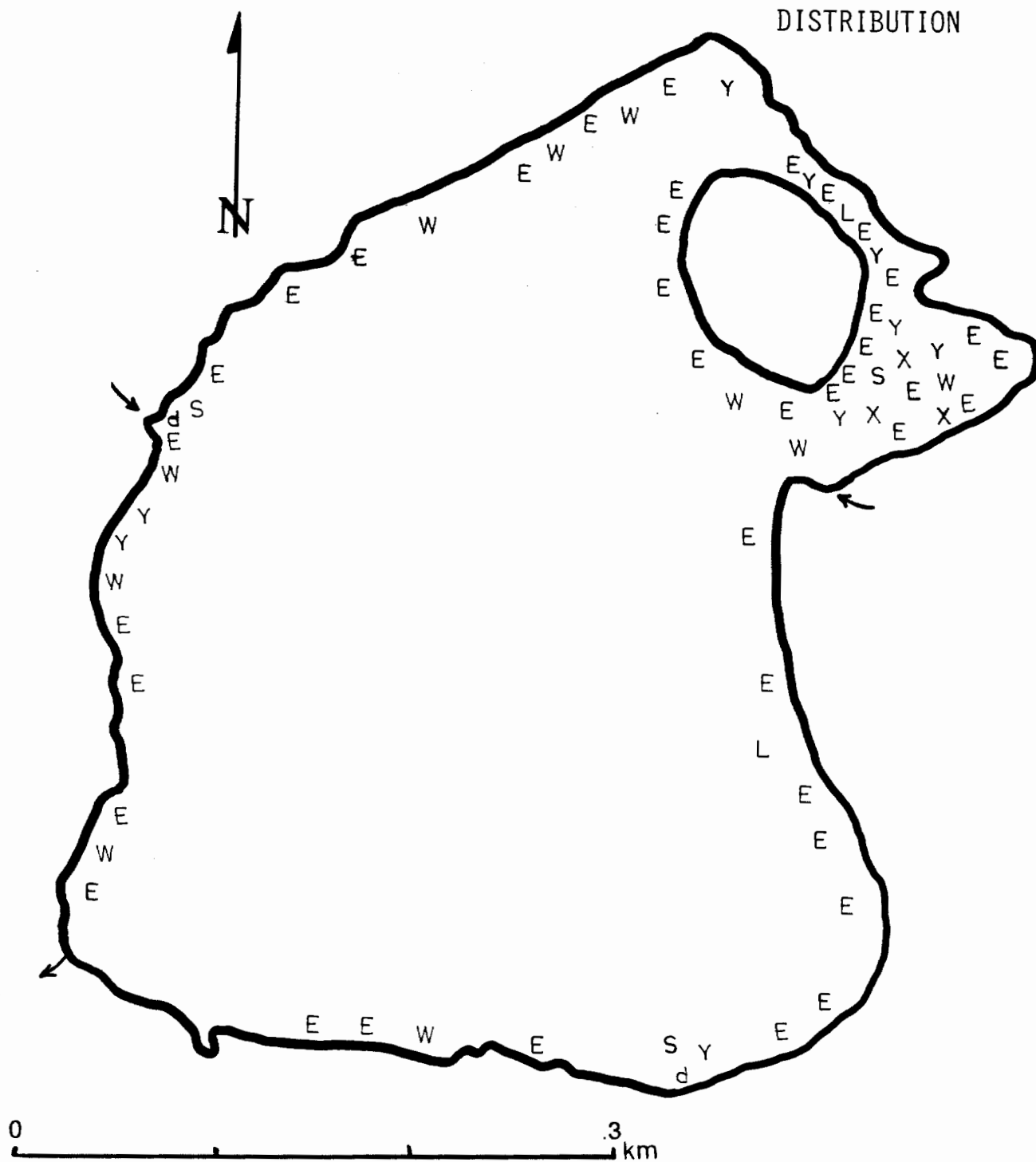
TIME: 730

*Dissolved oxygen values are in mg/L

Sawyer Pond

Livermore

AQUATIC PLANT
DISTRIBUTION



[illegible]